a file storage to store files of resources, whereby groups of workers can access the resources through clients over a network; and

a server coupled by the network to said file storage and to the clients, said server maintaining allocation information indicating allocation of a corresponding resource to one or more of the groups, determining whether the resource is available to a requesting group based on the allocation information, and selectively changing the allocation information when a job requiring access to the resource is completed.

REMARKS

In the Office Action mailed August 16, 2000 the Examiner rejected claims 1-18 and 25-34 under 35 USC 103(a) as being unpatentable over Fargher (US Patent No. 5,826,040) in view of Matsuzaki (US Patent No. 5,767,848) considered with Sato (Pub. No. JP 404257956A) or Hoffman (US Patent No. 5,261,102).

The foregoing rejections are respectfully traversed.

In the Office Action mailed August 16, 2000 the Examiner noted that claims 1-18 and 25-34 were pending, and rejected claims 1-18 and 25-34. Claims 1, 27, 29, 30, 31 and 32 have been amended and, thus, in view of the forgoing claims 1-18 and 25-34 remain pending for reconsideration, which is requested.

No new matter has been added in this Amendment.

PRESENT INVENTION

The present invention relates to groupwise resource management. In particular, in the present invention a job requiring resources (e.g., windows, programs (objects), commands, and data including, voice, animated images, and still images) is allocated to a group (Fig. 1; page 8, lines 19-24; page 9, lines 25-31; Fig. 9; page 16, lines 14-20; page 23, lines 17-24 and Figs. 36 and 37; and *see also* page 13, lines 4-6 of the present Application). A job definition form in the

present invention defines the jobs of each group, thereby accommodating groupwise resource management. In contrast, in conventional systems individual user's are allocated to a job. Therefore, in conventional systems to achieve groupwise resource management, a typical method is to assign a group to each resource and assign a user to one or more groups (*See e.g.*, page 1, lines 27-33 of the present Application).

PRIOR ART

Fargher

Fargher discloses a method for planning a production schedule within a factory (Abstract). In particular, Fargher discloses a plan representation chosen to model the manufacturing environment. The plan representation is based on the processing capacity of resource groups within the factory. Each resource group has an associated set of processing capabilities which every member of the group is able to perform. Since a single semiconductor manufacturing machine may perform several different processes, a machine may be a member of several different resource groups. *See* col. 7, lines 13-33.

Although, Fargher discloses that "a machine may be a member of several different resource groups" (col. 7, lines 25-26), Fargher does not disclose or suggest *managing* resources (e.g., a machine) group by group (emphasis added) (Fig. 1; page 8, lines 19-24; page 9, lines 25-31; Fig. 9; page 16, lines 14-20; and page 23, lines 17-24 of the present Application). In particular, the present invention *manages* resources (computer resources) group by group using the job definition form (Figs. 9, 36 and 37). Fargher discloses that the plan representation does not distinguish which resources (i.e., members), within a resource group, is planned to process a particular piece of work represented within a plan. The representation simply commits processing time for the whole resource group to a particular piece of work (col. 7, lines 34-36). Therefore, in contrast to the present invention, in Fargher resources are not expressly allocated

to a resource group, for example, as in the job definition form of the present invention (*see* Fig. 9; page 16, lines 14-20; page 23, lines 27-34 and Figs. 36 and 37 of the present Application).

Further, the Examiner asserts on page 4, lines 3-9 of the Office Action that it "would have been obvious to the skilled artisan if it is desired to allocate computer resources to a group of workers working on a specific project with the motivation of avoiding conflicts of groups when accessing particular computer resources" (*see also* page 3, lines 6-11 of the Office Action and Fargher, col. 7, lines 27-30). However, the present invention is not based on a "motivation of avoiding conflicts of different groups." In the present invention, computer resources cannot be utilized by groups that have no right to use, or no permission to use (i.e., managing security of resources), but it may be possible to utilize the computer resources under predetermined conditions applied to the groups that have no right to use. For example, in the present invention a job definition form can define persons who can utilize resources, or the predetermined conditions for utilizing the resources, through a particular contract for the worker. As a result, if the worker is contracted in the job definition form, the worker can freely utilize the resources in accordance with the contract without particular prosecutions. In this case, if the worker who can utilize the resources based on the contract (i.e., authorized worker), belongs in one project team, another worker who belongs to the same project team can also utilize the resources through the authorized worker. Accordingly, in the present invention, since the utilization of the resources is performed based on the job definition body, it is very easy to utilize the resources even if the worker is moved from one project team to another project team. Therefore, in contrast to the present invention, if as suggested by the Examiner the scheduler in Fargher determines the specific machine loadings, such scheduling would not be allocation of a resource as in the present invention since to avoid a conflict a scheduled machine in Fargher cannot be accessed by another group even though another group may have rights (i.e., access rights) to access the machine (Fargher, col. 4, lines 52-54).

Matsuzaki

Matsuzaki discloses a development support system for supporting new product development activities (Abstract). In particular, Matsuzaki discloses exchange of rights to use resources via electronic mail (col. 13, lines 54 through col. 14, line 19). However, in contrast to the present invention Matsuzaki associates members of a single project team with resources by assigning the members to each activity unit (col. 14, lines 29-33). Therefore, Matsuzaki does not disclose or suggest managing resources group by group (page 23, lines 17-24 of the present application).

Sato

Sato discloses a group manager to classify shared information/individual information (Abstract).

Hoffman

Hoffman discloses a method for determining the access privileges currently held by a database user with respect to objects in the database. In particular, Hoffman discloses automatically determining those objects to which the user has indirect access privileges. Hoffman discloses automatically determining all access groups to which the user belongs; and automatically determining those objects to which those access groups have access privileges. (Abstract).

DISTINCTIONS OF THE PRESENT INVENTION OVER THE PRIOR ART

Independent claims 1, 27 and 30 have been amended to improve form by better emphasizing the distinguishing features of the present invention. Support for the amendments is found on page 9, lines 11-13; page 8, lines 19-24; and page 16, lines 14-20 of the present Application.

In contrast to the forgoing references, the present invention (as recited in each independent claim 1, 27, 30, 33 and 34, using the recitation of claim 1 as an example) comprises "a resource manager that manages resources of jobs according to groups of workers, the resources allocated to each group, and each resource being further allocated for use by workers of the group in performing each job to be carried out by the group" and "a job monitor that monitors the jobs carried out by the groups" and "a scheduler that schedules the jobs of each group according to a procedure specific to the group."

Further, dependent claims 2, 29, and 31 (using the recitation of claim 2 as an example) recite the distinguishing feature of "a job definition form defining the jobs for each group, wherein said resource manager, job monitor, and scheduler exchange rights to use the resources among the groups according to the job definition form."

Therefore, the present invention manages resources (computer resources) group by group using the job definition form (Fig. 1; page 8, lines 19-24; page 9, lines 25-31; Fig. 9; page 16, lines 14-20; page 23, lines 17-24; and Figs. 9, 36 and 37 the present Application). A benefit of the patentably distinguishing feature of the present invention is to efficiently manage security of the job, for example, by maintaining security (e.g., restricting access to) of the job assigned to the group, when a member (i.e., a worker) of the group leaves or is transferred to another group. *See also* other group based functions on page 14, lines 28-32; and page 13, lines 31-32 and Fig. 3.

Dependent claims 2-18, 25, 26 and 32 (depending, either directly or indirectly, from claim 1); 28-29 (depending, either directly or indirectly, from claim 27); and 31 (depending from claim 30) are also patentably distinguishing over the foregoing references at least due to their dependencies from the independent claims 1, 27 and 30.

Withdrawal of the rejection of claims 1-18 and 25-34, and allowance of claims 1-18 and 25-34 is respectfully requested.

CONCLUSION

In light of the amendments and remarks presented above, Applicant submits that this Application is now in condition for allowance, and such action is hereby respectfully requested.

If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

Respectfully submitted,
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CERTIFICATE UNDER 37 CFR 1.8(a)

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on December 18, 2000

STASS & HALSEY

By: _____

Date: December 18, 2000